

1 **5.0 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**
2

3 This section summarizes the environmental advantages and disadvantages associated
4 with the proposed Project and the alternatives. Based upon this discussion, the
5 environmentally superior alternative is selected as required by the CEQA.

6 The CEQA does not provide specific direction regarding the methodology of comparing
7 alternatives and the proposed Project. Each project must be evaluated for the issues
8 and impacts that are most important; this will vary depending on the project type and the
9 environmental setting. Issue areas that are generally given more weight in comparing
10 alternatives are those with significant long-term impacts. Impacts that are short-term
11 (e.g., construction-related impacts) or those that can be mitigated to less than significant
12 levels are generally considered to be less important.

13 This comparison is designed to satisfy the requirements of State CEQA Guidelines
14 Section 15126.6(d), Evaluation of Alternatives, which states that:

15 *“The EIR shall include sufficient information about each alternative to allow meaningful
16 evaluation, analysis, and comparison with the proposed Project. A matrix displaying the
17 major characteristics and significant environmental effects of each alternative may be
18 used to summarize the comparison. If an alternative would cause one or more
19 significant effects in addition to those that would be caused by the Project as proposed,
20 the significant effects of the alternative shall be discussed, but in less detail than the
21 significant effects of the Project as proposed.”*

22 In accordance with State CEQA Guidelines Section 15126.6(d) as presented above, this
23 EIR provides sufficient information about each alternative to allow meaningful
24 evaluation, analysis, and comparison with the proposed Project and the other
25 alternatives.

26 The CEQA also requires that the specific No Project Alternative be evaluated, along
27 with its impacts, as part of the EIR (the State CEQA Guidelines Section 15126.6(e)). As
28 such, the No Project Alternative was not subject to the screening analysis and has been
29 evaluated as an Alternative for the Project throughout the EIR. The relative impacts
30 associated with each alternative are summarized in Table 5-1.

31 The discussion below compares impacts associated with the proposed Project with
32 those associated with the No Project Alternative and the other alternatives. These
33 impacts are identified as a result of the analysis provided in Section 4.0, Environmental

1 Analysis. An Alternative would be considered superior to the proposed Project if there
2 is a reduction in impact classification. In cases where the impact from an Alternative is
3 in the same class as for the proposed Project, differences in severity of the impact are
4 analyzed.

5 In evaluating the proposed Project and the various alternatives, there are several key
6 issue areas that need to be considered. First and foremost, potential impacts
7 associated with accidental oil spills are a key concern. The relative impact to public
8 safety and health is also a critical component in the evaluation of alternatives. Finally,
9 quality of life issues, such as visual resources and recreational impacts need to be
10 considered.

11 **5.1 The Proposed Project versus the No Project Alternative**

12 In evaluating the No Project Alternative versus the proposed Project, one key issue
13 stands out. The proposed Project will result in a cessation of crude oil barge
14 transportation, thereby reducing the potential for offshore oil spill impacts, and resulting
15 in the abandonment and removal of the EMT. Crude oil transportation via pipeline is
16 environmentally preferred over marine barge transportation, since both the likelihood of
17 an oil spill impacting the sensitive marine environment and the size of the worst case oil
18 spill would be greatly reduced by the use of a pipeline. In addition, the abandonment of
19 the EMT would result in numerous beneficial impacts related to public safety, marine
20 water quality, marine biological resources, visual resources, land use and recreation.
21 There is some controversy associated with the relative abandonment of the EMT as part
22 of the proposed Project, since it is highly likely that the EMT will need to be
23 decommissioned and abandoned between 2013 and 2016, when the onshore lease
24 expires. The EMT onshore facilities are owned by the University of California Santa
25 Barbara (UCSB), which is on record as stating that the lease will not be renewed under
26 any circumstance. The offshore lease renewal from the CSLC is also currently
27 undergoing environmental review, with a proposed termination date of 2013. Therefore,
28 it is reasonable to make a case that many of the environmental benefits associated with
29 the proposed Project would occur under the No Project Alternative, but could be several
30 years from happening.

31 Another complicating factor associated with the evaluation of the No Project Alternative
32 is the relative duration of crude oil production at Platform Holly under this alternative
33 versus the proposed Project. Currently, wells drilled from Platform Holly, and located
34 along the eastern edge of lease 3242, are draining petroleum from the proposed

1 extension area. Under the No Project Alternative, the Applicant would continue to
2 produce these reserves from these wells and from the proposed extension area, but at
3 a lower rate than under the proposed Project, and would not be likely to extract 100
4 percent of the recoverable reserves from the lease extension area (the far eastern end
5 of the South Ellwood Field). Under the proposed Project, the Applicant would drill new
6 wells into the extended portion of lease PRC 3242, and produce at a higher rate and
7 with higher efficiency. It is uncertain if this more efficient recovery of petroleum
8 reserves would shorten the life of the existing facilities and accelerate the eventual
9 decommissioning of the entire South Ellwood Field facilities; i.e., Platform Holly and the
10 EOF. The Applicant provides in their application that the proposed life of producing
11 from Holly under the No Project Alternative is the same as that of the proposed Project
12 (see Table 3-2). However, under the No Project Alternative, it is highly likely that a
13 portion of the South Ellwood Field would never be recovered.

14 **5.2 The Proposed Project versus No EOF Modifications**

15 Another alternative that was evaluated in this EIR was where no modifications would be
16 made to the EOF as part of the development project. If the upgrades to the EOF
17 included in the proposed Project do not meet the requirements for a Limited Exception
18 Determination (LED) with the city of Goleta, then no modifications would be allowed at
19 the EOF without a re-zoning of the property and a vote of the people of the city of
20 Goleta. This alternative would avoid a potentially significant, unavoidable Class I land
21 use impact for the proposed Project, but other Class I land use impacts would
22 potentially remain related to production from new leases and added production at the
23 EOF. From an environmental, health and safety perspective, this alternative could be
24 found to have fewer environmental benefits than those associated with the proposed
25 Project because some of the proposed modifications may be found to have
26 environmental benefits with regards to air emissions and without the changes those
27 benefits would not take place.

28 If the proposed modifications did not meet the LED findings and the city of Goleta were
29 to consider a rezone to accommodate the proposed Project, the city could consider a
30 re-designation of the EOF to a more limiting, legal non-conforming use that would allow
31 the Project to proceed as proposed, while including limitations on the overall life of the
32 Project. In that case, environmental impacts and mitigation measures would remain as
33 analyzed in this document for the proposed Project, with the potential reduction in the
34 impacts related to an imposed limit on the Project life. The limitation of the Project life
35 could reduce the probability of an oil spill over the Project life and other impacts making

1 this alternative rezone of the property preferable to the proposed Project or preferable to
2 a potential rezone to an industrial zone district. A rezone to an industrial zone district
3 could open up the area for other industrial uses beyond the life of the proposed Project,
4 with the additional environmental impacts that those potential added industrial uses
5 would entail.

6 **5.3 The Proposed Project versus Processing at Platform Holly**

7 The alternative of moving all oil and gas processing operations to Platform Holly offers
8 numerous benefits over the proposed Project, but would not avoid the most significant
9 impacts associated with an accidental oil spill. In this case, processing on Platform
10 Holly would increase the risk of an offshore oil spill. Conversely, offshore processing
11 would allow the partial abandonment of the EOF, with all processing equipment
12 removed; and limited equipment remaining for crude oil storage, crude oil pumping,
13 electricity generation, and sales gas compression. Environmental benefits would
14 include air quality, public safety, visual resources, land use and recreation.

15 **5.4 The Proposed Project versus Las Flores Canyon Processing: Offshore Gas
16 and Onshore Oil Pipeline**

17 The EIR also evaluated two alternatives, which involve moving all oil and gas
18 processing to the ExxonMobil LFC consolidated facility. The first of these alternatives
19 evaluated the installation of a new produced gas pipeline, power cable and utility line
20 offshore between Platform Holly and the LFC, while the crude oil pipeline would be
21 installed as proposed by the Project. This alternative would allow for the cessation of all
22 oil and gas processing at the EOF and abandonment of the EOF, with the exception of
23 a valve box. Environmental benefits would include air quality (related to health risk),
24 public safety, visual resources, land use and recreation impacts. Oil spill risk would be
25 the same as the proposed Project with associated mitigation measures, which would
26 produce the lowest risk of oil spills to the offshore/marine environment (utilizing
27 mitigation measures HM-3a, HM-3b, HM-3c, HM-3d and HM-4a requiring that the Holly
28 to shore pipeline be monitored for corrosion and integrity and be directionally drilled
29 through the beach area).

30 Production from the proposed restart of the PRC lease 421, if permitted, could tie in
31 directly to the pipeline at the EOF valve box and be sent to LFC.

1 **5.5 The Proposed Project versus Las Flores Canyon Processing: Offshore Gas**
2 **and Offshore Oil Pipeline**

3 The second of the LFC alternatives would involve constructing all new pipelines and a
4 power cable offshore between Platform Holly and the LFC facility. This alternative
5 would result in the complete abandonment of the EOF, since all processing and power
6 supply would be accommodated by LFC facilities. Environmental benefits would include
7 air quality, public safety, visual resources, land use, and recreation. Overall oil spill risk
8 (onshore and offshore) would be the lowest of any of the alternatives or the proposed
9 Project, due to the shortest pipeline route to the LFC/AACP location. While this
10 alternative, with a longer offshore crude oil pipeline, would create a greater risk of
11 offshore crude oil spills with resulting impacts to marine water quality and biological
12 resources, than the mitigated proposed Project, it would avoid almost all impacts
13 associated with onshore pipeline construction and operation between the EOF and LFC.

14 In the event that production is resumed at lease PRC 421, crude oil and gas from the
15 421 Project would need to be routed to the LFC via the existing pipelines between the
16 EOF and Platform Holly, where it would be commingled with Platform Holly production
17 and shipped to the LFC via the new offshore pipelines. This alternative would require
18 some crude storage, pigging and pumping equipment at the EOF if lease 421
19 production is developed. The use of the existing Holly to EOF pipelines for lease PRC
20 421 production would increase the spill risk above the other alternatives or the mitigated
21 proposed Project.

22 **5.6 Environmentally Superior Alternative**

23 Given the relative impacts and merits of the proposed Project and each alternative that
24 was considered in this EIR, and based on the discussion presented above, the LFC
25 Processing: Offshore Gas and Offshore Oil Pipeline Alternative is considered to be the
26 environmentally superior alternative. This alternative has advantages over the
27 proposed Project in reducing impacts in a number of issue areas as a result of the
28 elimination of the EOF. Specifically, a reduction in air quality impacts by consolidating
29 processing of oil and gas at LFC; public safety by eliminating the risks associated with
30 oil and gas processing at the EOF and consolidation at the LFC facility, which is
31 remotely located from sensitive receptors; visual resources as a result of the elimination
32 of the EOF, and land use and recreation for the same reason. These benefits would
33 also be applicable to a comparison between this alternative and the No EOF
34 modifications alternative.

5.0 Environmentally Superior Alternative

1 This alternative would also be superior to the No Project Alternative because under the
2 No Project Alternative crude oil transportation via barge would continue at least until
3 2013 and potentially until 2016, which has an increased risk of an oil spill when
4 compared to pipeline transportation. In addition, the EMT would not be abandoned in
5 the near term and the EOF would continue as it currently operates.

6 The LFC Processing: Offshore Gas and Offshore Oil Pipeline Alternative is also
7 considered to be environmentally superior to Processing at Platform Holly because
8 impacts associated with an oil spill from processing oil offshore would be eliminated with
9 this alternative.

10 Finally, the LFC Processing: Offshore Gas and Offshore Oil Pipeline Alternative is
11 considered superior to the LFC Processing: Offshore Gas and Onshore Oil Pipeline
12 Alternative for a number of reasons, including:

- 13 • The risk associated with the existing crude oil pipeline between Platform Holly
14 and the EOF would be reduced through the construction of a new offshore
15 pipeline;
- 16 • Since the new offshore pipelines and power cable would be installed as a bundle,
17 all construction air quality impacts associated with the onshore pipeline would be
18 avoided;
- 19 • This alternative would only require a single HDD shoreline crossing at the LFC,
20 and avoid a second crossing at the EOF site; and
- 21 • The use of offshore pipelines would avoid all creek crossings, with the associated
22 potential for HDD frac-out and crude oil spill impacts to onshore biological and
23 water resources that are associated with the onshore pipeline, thus avoiding a
24 wide variety of potentially significant impacts.

25 5.7 PRC 421 Implications

26 With the identification of LFC processing and offshore oil and gas pipelines alternative
27 as the environmentally superior alternative, production from PRC 421 would not have
28 direct access to a crude oil pipeline to transport the oil to market. Should both the LFC
29 processing and offshore oil and gas pipelines alternative and the resumption of
30 production at PRC 421 Recommissioning Project be approved by the CSLC, crude oil
31 produced from PRC 421 would need to be transported to Platform Holly via one of the
32 existing emulsion, gas or utility pipelines between Platform Holly and the EOF, or truck
33 transportation would be required to deliver the crude oil to market. Production from PRC

1 421 would otherwise be stranded. Currently, there is no infrastructure to accommodate
2 either crude oil transportation mode.

3 Since the PRC 421 Recommissioning Project Draft EIR identifies pipeline transportation
4 as the environmentally preferable option over trucking, production from PRC 421 would
5 need to be piped to platform Holly. It is technically feasible to transport crude oil from
6 PRC 421 to Platform Holly using one of the existing pipelines between Platform Holly
7 and the EOF. Additional infrastructure at PRC 421 would be required, including
8 adequate pumping capacity to reach Platform Holly with adequate pressure, a crude oil
9 surge tank (approximately 500 barrels) and a pig launcher for pipeline cleaning and
10 inspection. This equipment could be accommodated at the PRC 421 site or at the EOF
11 property. However, additional environmental review would be required since this
12 alternative was not evaluated in the PRC 421 Recommissioning EIR that was prepared
13 for PRC 421.

Table 5-1
Summary of Environmental Impacts for the Proposed Project and Alternatives

Impact Class I = Significant adverse impact that remains significant after mitigation.
 II = Significant adverse impact that can be eliminated or reduced below an issue area's significance criteria.
 III = Adverse impact that does not meet or exceed an issue area's significance criteria.
 IV = Beneficial impact.
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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
Section 4.1 Geological Resources							
GEO-1	Localized sloughing of unconsolidated alluvial sands and artificial fill.	III	NI	II	III	II	III
GEO-2	Beach scour could substantially damage structural components of the EOF.	II	I	II	II	II	III
GEO-3	Increased erosion and sedimentation of local drainages.	II	NI	II	II	II	III
GEO-4	Expansive soils along the proposed pipeline alignment could potentially affect the structural integrity of the pipeline.	II	NI	II	II	II	NI
GEO-5	Seismically induced ground failure that would expose people and structures to greater than normal risk.	II	II	II	III	III	III
GEO-6	Increased natural oil and gas seepage as a result of waste waster reinjection.	II	II	II	II	II	II
Section 4.2 Hazards and Hazardous Materials							

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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
The No Project Alternative would continue barging and transportation of NGL by truck, thereby producing greater transportation impacts to public health and transportation spill risk impacts than the proposed Project. The No Project Alternative would have a lower facility spill impacts than the proposed Project because no additional drilling would take place on Holly and pipeline throughputs would remain at historical levels. The No EOF Modifications Alternative would have similar impacts as the proposed Project. The Holly Alternative would have lower facility related public health risks than the proposed Project due to the reduced operations at the EOF and the transportation public health risks would be less than the proposed Project or other alternatives due to the elimination of LPG transportation. Spill risks associated with the Holly Alternative would be greater than the proposed Project due to the increased crude processing on Holly. The LFC alternatives would have the lowest facility public health risks as the EOF operations would be moved to LFC, away from public receptors. The LFC with offshore pipeline would have the lowest overall spill risk; however, the LFC with onshore pipeline would have the lowest risk of spills to the marine environment. The LFC alternatives would have the same transportation public health risks as the proposed Project related to LPG transportation.							
HM-1	Reduced use of natural gas liquids storage at the EOF would produce lower risks to public health than current operations.	IV	NA	NA	IV	IV	IV
HM-2	Increased transportation of LPG along area highways would increase the risks to public health over current operations.	I	NI	I	IV	I	I
HM-3	Increase in drilling at Platform Holly and the increased spill sizes of emulsion/crude.	I	NI	I	I	I	I
HM-4	Elimination of barge loading operations would reduce the frequency and volume of spills to the environment for transportation.	IV	NA	IV	IV	IV	IV
Section 4.3 Air Quality							

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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
The No Project Alternative would have fewer impacts than the proposed Project for NOx emissions because the additional drilling and supply boats would not be operating, which produce more NOx than is saved by the removal of the EMT, and increased throughput at the EOF would not occur. However, ROC emissions would increase with the No Project Alternative because of the continued use of the EMT. Construction impacts would also not occur under the No Project Alternative. The No EOF Modifications Alternative would increase emissions over the proposed Project because of the increased use of the heaters and thermal oxidizers at the EOF and the increased use of the Holly drilling generators and the lack of equal NOx control on this equipment. Processing on Holly would have similar operational emissions as the proposed Project, but would have higher construction emissions due to increased construction on Holly and the abandonment of equipment at the EOF. The LFC alternatives would have similar operational emissions as the proposed Project but would have higher construction emissions due to the abandonment at the EOF and the construction of offshore pipelines.							
AQ-1	Construction activities would result in emissions at the EOF, EMT, and along the new pipeline corridor.		II	NI	I	II	II
AQ-2	Increased operational emissions at the EOF and Platform Holly	III	NI	II	III	III	III
AQ-3	Increased potential for an upset event with a subsequent gas release or an oil spill, and thus could potentially result in increased nuisance odor events	III	NI	II	III	III	III
AQ-4	Increased HAP emissions from the EOF and thus increase health risk	III	NI	II	III	III	III
AQ-5	Project would produce higher greenhouse gas emissions	I	NI	I	I	I	-
Section 4.4 Hydrology, Water Resources, and Water Quality							

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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
	The No Project Alternative would have fewer construction impacts than the proposed Project because construction impacts would not occur. However, benefits associated with elimination of barging operations would not occur. The No EOF Modifications would have similar impacts as the proposed Project. The Holly Alternative would have slightly increased impacts over the proposed Project due to the increased crude oil processing on Holly and the increased potential for spills at Holly. The LFC Onshore Alternative would have similar offshore impacts as the proposed Project, but slightly greater onshore due to the decommissioning of the EOF. The LFC Offshore Pipeline Alternative would have fewer impacts to onshore water resources (due to construction and spills) but would have increased impacts to offshore water resources due to spills over the proposed Project.						
WQ-1	Accidental discharge of petroleum hydrocarbons into marine waters would adversely affect marine water quality.	I	I	I	I	I	I
WQ-2	Reduction in the frequency, volume, and spatial extent of offshore oil spills by the elimination of barge loading and transportation would benefit marine water quality.	IV	I	IV	IV	IV	IV
WQ-3	Sand jetting the utility and power lines into nearshore seafloor sediments will temporarily increase turbidity and deleteriously impact water quality within sensitive kelp habitats located nearby.	II	NI	II	II	II	II
WQ-4	Disturbance of hydrocarbon-contaminated sediments near Shane Seep, or other seeps, during decommissioning of the offshore EMT could result in an acute increase in hydrocarbon concentrations within the water column.	II	NI	II	II	II	II

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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
WQ-5	Pipeline construction and EMT abandonment could degrade surface and groundwater quality (note: classification reflects impact associated with pipeline construction; potential impacts associated with EMT abandonment are unclassified pending a complete abandonment and reclamation plan).	II	NI	II	II	II	III
WQ-6	Potential horizontal directional drilling related frac-outs during pipeline construction could degrade surface and groundwater quality.	II	NI	II	II	II	II
WQ-7	A rupture or leak from the EOF, the existing onshore portion of the oil pipeline from Platform Holly to the EOF, or the proposed oil pipeline could substantially degrade surface and groundwater quality	I	NI	I	I	I	III
Section 4.5 Biological Resources							
BIO-1	Accidental discharge of petroleum hydrocarbons into marine waters would adversely affect marine biological resources.	-	-	-	-	-	-

The No Project Alternative would have fewer construction impacts than the proposed Project because construction impacts would not occur. However, benefits associated with elimination of barging operations would not occur. The No EOF Modifications would have similar impacts as the proposed Project. The Holly Alternative would have slightly increased impacts over the proposed Project due to the increased crude oil processing on Holly and the increased potential for spills at Holly. The LFC Onshore Alternative would have similar offshore impacts as the proposed Project, but slightly greater onshore due to the decommissioning related construction at the EOF. The LFC Offshore Pipeline Alternative would have fewer impacts to onshore biological resources (due to pipeline construction and spills) but would have increased impacts to offshore biological resources due to spills over the proposed Project.

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Impact No.	Impact Description	Proposed Project No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
BIO-2	Reduction in the frequency, volume, and spatial extent of offshore oil spills by the elimination of barge loading and transportation would benefit marine biological resources.	IV	NA	IV	IV	IV
BIO-3	Accidental discharge of petroleum hydrocarbons into marine waters would adversely affect commercial and recreational fishing.	I	I	I	I	I
BIO-4	Accidental discharge of petroleum hydrocarbons into marine waters would adversely affect kelp and commercial kelp harvesting.	III	III	III	III	III
BIO-5	Sand jetting utility and power lines into nearshore seafloor sediments will temporarily increase turbidity within sensitive kelp habitats.	III	NI	II	II	NI
BIO-6	Sediment disturbance during decommissioning of the EMT moorings and the loading line could result in increased turbidity and hydrocarbon concentrations within the water column.	III	NA	II	II	III
BIO-7	Marine vessel traffic to and from Platform Holly could cause loss or damage to commercial fishing gear in the project area. Fishing preclusion zones during offshore construction and decommissioning could limit fishing activities.	II	III	II	II	II
BIO-8	Increases in vessel traffic may adversely affect marine mammals and turtles.	II	III	II	II	II

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BIO-9	Marine Construction and Vessel Traffic Impacts on Commercial and Recreational Fishing.	II	NI	I	II	II	II
BIO-10	Noise and lighting from vessel support and transit activities may potentially disturb marine mammals and birds in the project area.	III	III	III	III	III	III
BIO-11	Construction activities have the potential to affect populations of threatened, endangered or candidate species or their habitat, and could result in a "take" of a special status species.	II	NI	I	II	II	II
BIO-12	Construction activities have the potential to result in permanent alteration or destruction of habitat that precludes re-establishment of native biological populations and/or prolonged disturbance to functional habitat of important biological resources.	II	NI	II	II	II	II
BIO-13	An accidental oil spill and subsequent cleanup efforts would result in an increased potential for a loss or injury ("take") of a threatened, endangered, or candidate species	I	I	I	I	I	I
BIO-14	Decommissioning of the EMT and restoration of area could result in a beneficial impact on Onshore Biological Resources.	NC	NC	NC	NC	NC	NC
Section 4.6 Cultural, Historical, and Paleontological Resources							

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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
CR-1	The No Project Alternative would have fewer impacts due to the lack of construction of pipelines, modifications to the EOF and decommissioning of the EMT, which might disturb cultural resources. The No EOF Modifications and Holly alternatives would have the same impacts as the proposed Project. The LFC Onshore Alternative would have impacts to both onshore and offshore areas, which would be greater than the proposed Project. The LFC Offshore Pipeline Alternative would have impacts to cultural resources from construction of the offshore pipeline only.	If grading and excavation associated with construction of the proposed project at the EOF extends below a depth of 10 feet, ground disturbing activities would potentially result in disturbance to unknown archaeological sites buried below the EOF.		NI			
CR-2	Grading and excavation associated with construction of the proposed project would potentially result in disturbance to unknown CA-SBA-139 deposits.		NI				NI
CR-3	Grading and excavation associated with construction of the proposed project would potentially result in a short-term increase in access to archaeological artifacts associated with CA-SBA-139 and the potential for unauthorized collection.		NI				NI
CR-4	Grading and excavation associated with construction of the proposed project would potentially result in a short-term increase in access to and the potential for unauthorized collection of archaeological artifacts associated with CA-SBA-83, CA-SBA-1676, and CA-SBA-1733.		NI				NI

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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
CR-5	Potential oil spills from the operational pipeline have the potential to affect cultural resources from subsequent cleanup and remediation activities.	II	NI	II	II	II	NI
CR-6	Activities associated with the decommissioning of the EMT would potentially result in disturbance to unknown CA-SBA-1327 and CA-SBA-2341 deposits.	NC	NI	NC	NC	NC	NC
CR-7	Activities could damage, disrupt, or adversely diminish the quality of an important prehistoric or historic archaeological resource or a historical resource such that its integrity would be diminished.	III	NI	II	II	II	III
CR-8	Activities could damage or disturb paleontological resources including Chumash midden sites due to proposed drilling on Platform Holly and offshore modifications to existing facilities.	III	NI	II	II	II	II
CR-9	Activities could damage, disrupt, or adversely diminish the quality of an important prehistoric or historic archaeological resource or a historical resource such that its integrity would be diminished.	III	NI	II	II	II	II
Section 4.7 Land Use, Planning, and Recreation							

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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
LU-1	The proposed Project and the alternatives would have the beneficial impact of the abandonment of the EMT, which would not be the case with the No Project Alternative. The LFC processing alternatives would have fewer impacts and are potentially more consistent with City policies than the proposed Project and the other alternatives because they would consolidate all processing at the LFC Facility and eliminate the EOF. The proposed Project and alternatives (except for the No Project Alternative) would all be inconsistent with the Goleta Safety Element policies, since they all would increase oil production and its risks. Accidental oil releases that could affect sensitive resources can potentially occur under the proposed Project and all of the alternatives.	The Proposed Project would be consistent with the adopted goals, objectives, and/or policies of approved land use plans, including the Santa Barbara County LCP and UCSB LDRP Amendment.	NC	NC	NC	NC	NC
LU-2	The Proposed Project would be inconsistent with the energy-related on- and off-shore use policies associated with the Applicant's facilities in the City of Goleta's General Plan.	-	III	-	-	III	III
LU-3	The Proposed Project would be inconsistent with the Open Space and habitat conservation policies Joint Proposal for the Ellwood-Devereux Coast Open Space and Habitat Management Plan, and the City of Goleta Safety Element policies.	-	III	-	-	-	-
LU-4	Accidental Oil Releases Could Affect Recreational Activities.	-	-	-	-	-	-
Section 4.8 Public Services							
The proposed Project and alternatives would exacerbate the demand on fire protection services. No noticeable advantage to any of the alternatives is noted in this issue area.							

Table 5-1 **Summary of Environmental Impacts for the Proposed Project and Alternatives**

Impact Class I = Significant adverse impact that remains significant after mitigation.
 II = Significant adverse impact that can be eliminated or reduced below an issue area's significance criteria.
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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
PS-1	Project could potentially result in increased demands for fire protection and emergency response due to the proposed drilling, higher oil and gas throughput, and more equipment at the EOF.	I	NI	I	III	NI	NI
PS-2	Project could result in increased demands for water due to construction, drilling and higher oil and gas throughput.	III	NI	II	III	III	III
PS-3	Project could result in increased discharge into the public sewer due to drilling and higher oil and gas throughput.	III	NI	II	III	III	III
PS-4	Project could result in increased demands for waste handling capacities due to drilling and higher oil and gas throughput.	III	NI	II	III	III	III
PS-5	Project could result in increased demands for waste handling capacities due to demolition and removal of equipment from the Project facilities.	NC	NI	NC	NC	NC	NC
Section 4.9 Transportation and Circulation							
The No Project Alternative would have no impacts as no construction or increased operations would produce additional traffic on area roadways. The No EOF Modification would have similar impacts as the proposed Project. The Holly Alternative would have greater construction impacts than the proposed Project as additional trips would be required to transport equipment to Holly. However, operations would be less than the proposed Project as truck trips to transport LPG and sulfur would no longer be required. The LFC alternatives would produce greater construction impacts than the proposed Project as there would be more decommissioning related traffic due to the decommissioning of the EOF. The LFC Offshore Alternative would have greater traffic impacts than the proposed project along the access road, but no impacts along the onshore pipeline route.							

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Impact No.	Impact Description	Proposed Project No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
T-1	The use of certain intersections or roadways to deliver/remove materials to/from the EOF, pipeline route, EMT, or Platform Holly could cause significant impacts to area roadways that are currently, or could in the future, have unacceptable levels of service.	II	NI	II	II	II
Section 4.10 Noise						
The No Project Alternative would have no impacts as no construction or increased operations would produce noise at the EOF or the pier area above current operations. The No EOF Modifications Alternative would have fewer impacts than the proposed Project due to the lack of construction at the EOF and the lack of new operations at the EOF. Processing on Platform Holly and the LFC alternatives would have fewer impacts than the proposed Project due to the abandonment of the EOF and the remote location of the LFC. Construction noise impacts would exist for the Holly and LFC alternatives due to the decommissioning of the EOF, but these would be short term in nature.						
N-1	The proposed Project would increase the noise from operations at the EOF.	II	NI	NI	IV	IV
N-2	Pipeline construction machinery would produce short-term noise in the vicinity of the pipeline right-of-way.	II	NI	II	II	IV
N-3	EOF construction could produce short-term noise to the Golf Course.	III	NI	NI	IV	IV
N-4	EMT Decommissioning construction could produce short-term noise to the mesa and Coal Point beach area.	III	NI	III	III	III
Section 4.11 Aesthetics/Visual Resources						

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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
VR-1	The removal of industrial features, such as the EMT tanks, from the visually sensitive areas would improve aesthetic views in the area	IV	NI	IV	IV	IV	IV
VR-2	The proposed new structures would not be taller than the existing structures at the EOF, and thus would not decrease quality of views from the visually sensitive areas.	III	NA	II	III	NI	NI
VR-3	Construction activities and machinery would create visually negative impact.	III	NI	II	II	II	III
VR-4	Installation of the pipeline would result in the removal of existing vegetation along the pipeline right-of-way, altering the visual character of the area.	II	NI	II	II	II	III
VR-5	Installation of the station would result in a presence of an industrial feature amidst rural viewshed, altering the visual character of the area.	III	NI	II	III	NI	NI
VR-6	An oil spill from Platform Holly, pipelines or the EOF could cause potential long-term adverse visual impacts from the oil spill and cleanup efforts	I	-	-	-	-	-

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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
VR-7	The removal of EOF equipment would enhance the visual character of the area	NI	NI	NI	IV	IV	IV
Section 4.12 Energy and Mineral Resources							
	The No Project Alternative would not have the beneficial impacts associated with the production of crude oil and the end product production of gasoline and diesel fuel. In addition, the No Project Alternative would not produce a net benefit to the electrical grid through the production of electricity by the Project (for all periods except peak periods). The No EOF Modifications Alternative would also not have a benefit to the electrical grid as the generators would not be installed. The Holly Alternative and the LFC alternatives would have impacts similar to the proposed Project impacts.						
ER-1	Impacts from increased electricity consumption at the Project facilities due to higher operation loads of the existing electrical equipment and consumption by the proposed equipment.	III	NI	II	III	III	III
ER-2	Impacts from diesel and natural gas consumption and crude oil production by the Project facilities.	IV	NI	IV	IV	IV	IV
Section 4.13 Agricultural Resources							
	The No Project Alternative would have fewer impacts than the proposed project because construction of the pipeline would not take place. The No EOF Modifications, the Holly and the LFC with onshore pipeline alternatives would have the same impacts as the proposed Project. The LFC with offshore pipeline would have fewer impacts than the proposed Project as a pipeline would not be construction through agricultural lands.						
AG-1	A spill of oil could result in impacts to the surrounding areas by impacting environmental resources.	II	NI	II	II	II	NI

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Impact No.	Impact Description	Proposed Project	No Project	No EOF Modifications	Process on Holly	LFC Process Onshore Crude Pipeline	LFC Process Offshore Crude Pipeline
AG-2	A spill of oil could result in impacts to the surrounding areas by impacting agricultural resources and local water supplies.	II	NI	II	II	II	NI
AG-3	Project-related activities could result in the temporary loss of prime agricultural resources and crop production.	III	NI	III	III	III	NI
Section 4.14 Environmental Justice							
EJ-1	The proposed Project could disproportionately impact minority and/or low-income populations.	III	III	II	III	II	III

The No Project Alternative have fewer impacts than the proposed Project as no project development would occur. Impacts from the No EOF Modifications and the LFC modifications would have similar impacts as the proposed Project. The Holly Alternative would have fewer impacts than the proposed project as no LPG trucking would occur.